

CITADEL PROJECT  
2016 PHASE 2 DRILLING PROGRAMME UPDATE No. 2  
DRILLING IDENTIFIES 4.8km COPPER SYSTEM AT RIMFIRE

**Key Points**

- **4.8km long copper mineralised trend identified at Rimfire, including the following intercepts:**
  - 23.0m at 0.12% copper in 16ACC0061 from 61.0m downhole;
  - 25.0m at 0.09% copper in 16ACC0071 from 56.0m downhole;
  - 18.0m at 0.10% copper in 16ACC0064 from 67.0m downhole; and
  - Additional metal associations include silver, zinc ± tungsten ± lead.
- Rimfire trend considered highly significant for a reconnaissance style drilling programme and provides compelling targets for follow-up.
- Initial drill testing of Blue Steel and Meekus IP targets did not appear to discover either sufficient sulphide mineralisation or false positive indicators (e.g. black shale, etc) to explain IP chargeability anomalies. Follow up exploration required.
- Programme fully funded by Rio Tinto and further results to follow.

**Overview**

Reconnaissance style broad spaced RC drilling identified significant copper mineralisation across a 4.8km trend at the Rimfire area, open in all directions, highlighting the broader Rimfire area as being a very large, highly prospective region for potentially hosting significant mineral deposits. The Rimfire area (Figures 1, 2 and 3) is located approximately 25km west of the Company's Magnum and Calibre gold-copper deposits.

A total of 10 RC drill holes and one diamond drill hole were drilled at Blue Steel and Meekus, which formed part of the 20km corridor hosting several Induced Polarisation (IP) chargeability anomalies, identified in the Company's 2016 Phase 1 exploration programme. The drilling did not encounter any significant mineralisation nor any black shale or other materials which can provide IP responses and which could explain the anomalies. Further exploration is warranted given the limited nature of the drilling to date and the nature of the IP anomalies identified.

**Corporate Directory**

Stephen Power  
*Executive Chairman*

Roger Mason  
*Managing Director*

Mark Rodda  
*Non-Executive Director*

Peter Buck  
*Non-Executive Director*

Gary Johnson  
*Non-Executive Director*

**Company Projects**

Citadel Project covering 1,335km<sup>2</sup> of prospective granted exploration licences in the World-Class under-explored Proterozoic Paterson Province of Western Australia. Rio Tinto may earn up to a 75% Interest in the Citadel Project by funding exploration expenditure of \$60m.

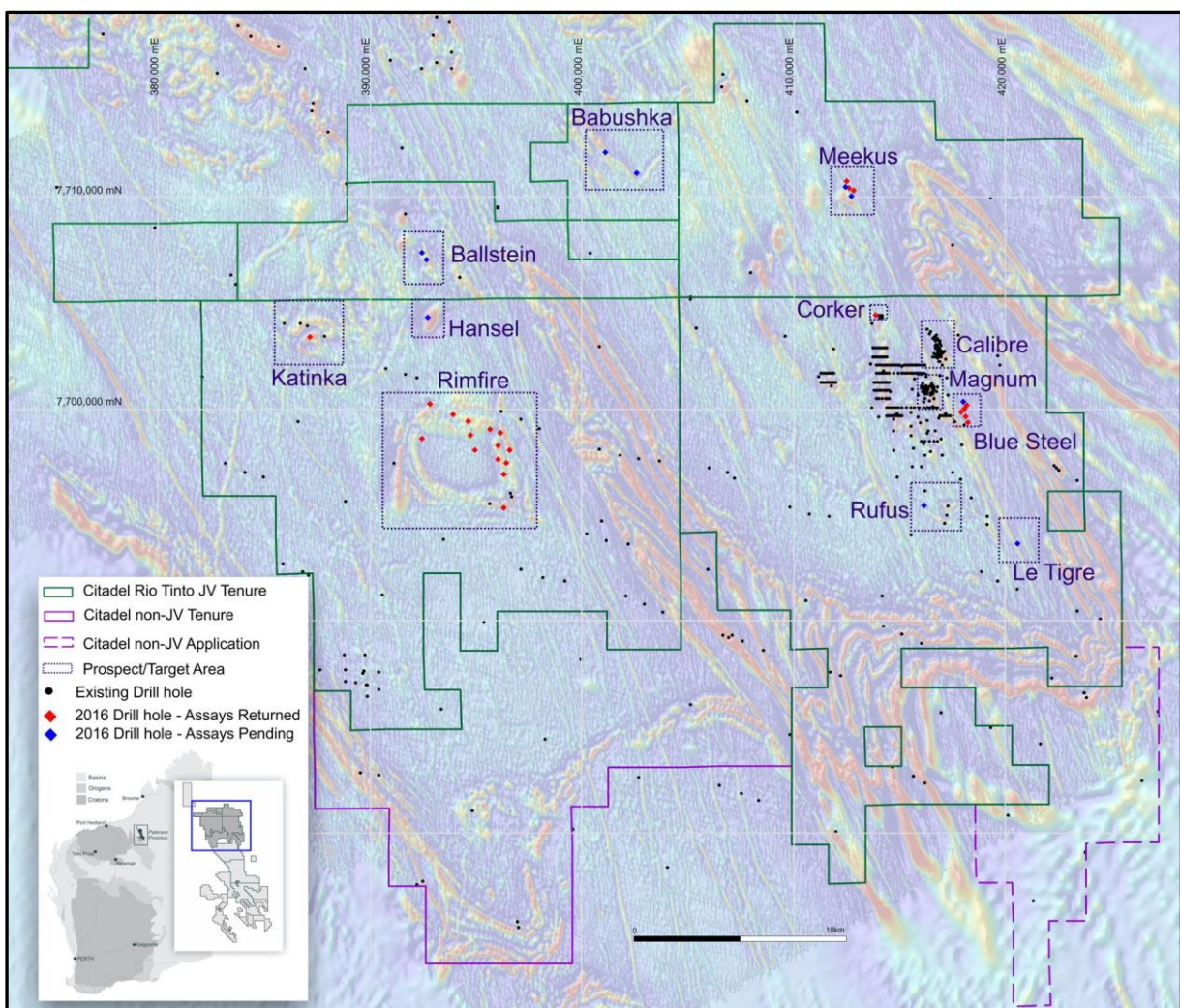
North Telfer Project covering an additional 1,310km<sup>2</sup> of prospective granted exploration licences located approximately 20km north of the Telfer mine, including the high-grade gold-copper Minyari and WACA deposits.

Paterson Project covering an additional 1,631km<sup>2</sup> of prospective granted exploration licences and 80km<sup>2</sup> of exploration licence applications located as close as 3km from the Telfer mine.

The 2016 Phase 2 Exploration Programme was fully funded by Rio Tinto Exploration Pty Limited (a wholly owned subsidiary of Rio Tinto Limited) and consisted of the following:

- 34 RC Drillholes completed for 5,215m;
- 1 Diamond Drillhole for 661.0m at Blue Steel;
- Assay results received to date for 25 RC drill holes, including 1 RC pre-collar, totaling 3,385m;
- Results pending for a further 10 drill holes, including the diamond drillhole at Blue Steel, across several target areas; and
- Remaining assay results expected to be received over the next several weeks. Further announcements will be made as results are received.

For the 2016 Phase 2 drill hole information refer to Table 1. See also Table 2 and Figures 1 to 4. Prior results have been published and links are provided in the body text.



**Figure 1: Citadel Project showing location of deposits and drill holes testing geophysical targets.**

**NB:** Also shows Antipa tenements over Airborne magnetic image (150m flight-line spacing at an altitude of 30m; Pseudo-colour First Vertical Derivative, Reduced to Pole, northeast sun illumination) Regional GDA94 / MGA Zone 51 co-ordinates, 10km grid.

## Rimfire Summary

The Rimfire area (Figures 1, 2 and 3) is located approximately 25km west of the Company's Magnum and Calibre gold-copper deposits. A total of 15 vertical RC drill holes with an average depth of 97m were drilled testing a range of Rimfire geophysical targets. 4 drillholes defined a 4.8km long copper (with minor gold) mineralised trend/s with associated geochemical anomalism (i.e. gold, silver, zinc  $\pm$  tungsten  $\pm$  lead). Intersections from these 4 holes are considered highly significant given the geochemical reconnaissance/'Aircore' nature of the Rimfire RC drilling programme and provide compelling targets for follow-up and include the following:

- 23.0m at 0.12% copper and 0.03 g/t gold in 16ACC0061 from 61.0m downhole, including;
  - 11.0m at 0.18% copper and 0.05 g/t gold from 88.0m downhole.
- 25.0m at 0.09% copper and 0.04 g/t gold in 16ACC0071 from 56.0m downhole, including;
  - 6.0m at 0.15% copper, 0.05 g/t gold and 748ppm zinc from 56.0m downhole.
- 18.0m at 0.10% copper, 0.04g/t gold and 254ppm zinc in 16ACC0064 from 67.0m downhole, including;
  - 5.0m at 0.14% copper, 0.03 g/t gold and 172ppm zinc from 76.0m downhole.
- 22.0m at 0.04% copper, 0.05g/t gold and 232ppm zinc in 16ACC0073 from 43.0m downhole, including;
  - 2.0m at 0.18% copper, 0.05 g/t gold and 298ppm zinc from 44.0m downhole.

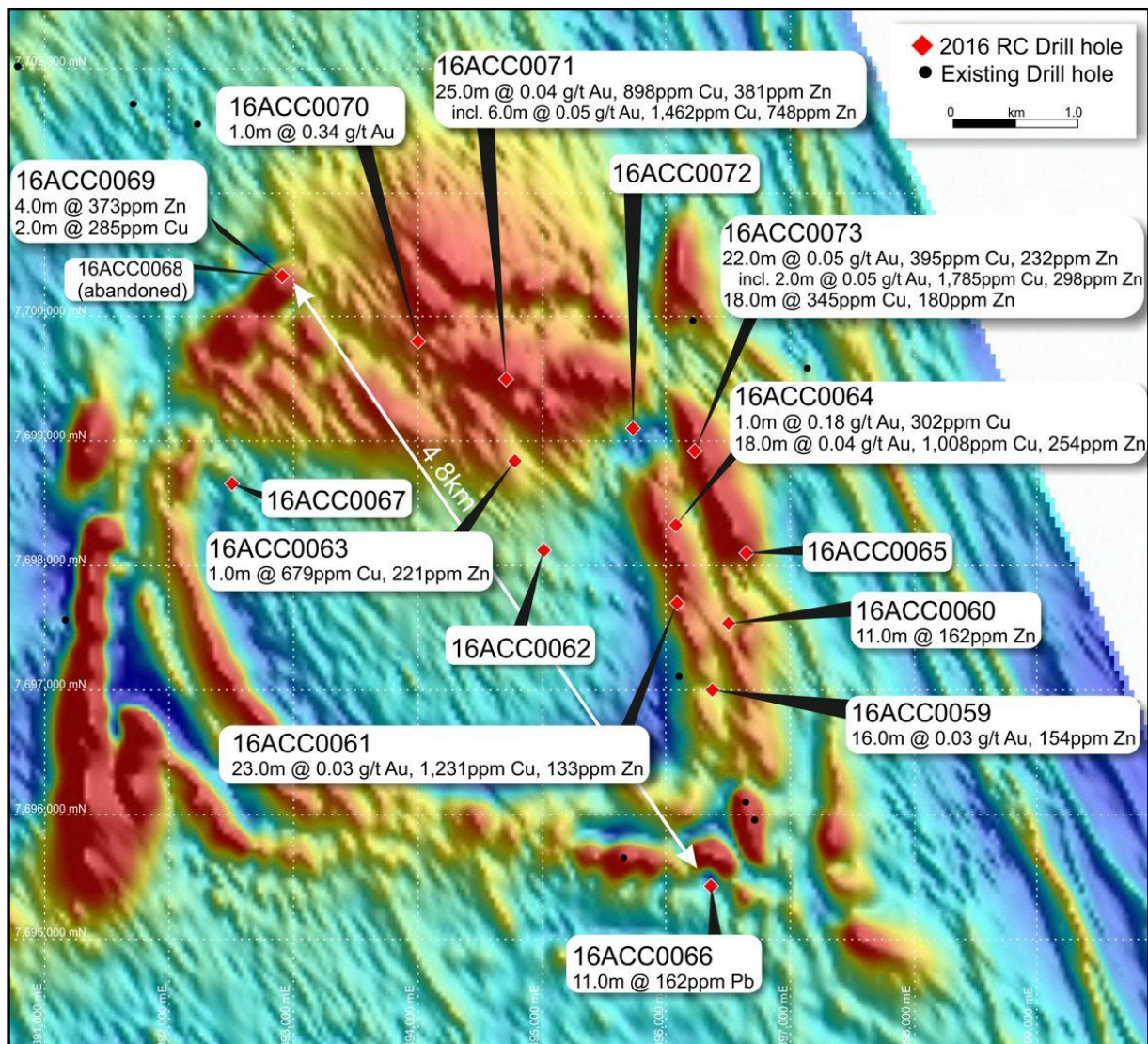
The Rimfire copper, gold, silver, zinc  $\pm$  tungsten  $\pm$  lead metal associations are consistent with the Paterson Province's major deposits including the > 1 Moz Calibre and Magnum gold-copper-silver-tungsten deposits, and Newcrest's world-class Telfer gold-copper-silver deposit and O'Callaghans tungsten and base metal deposit. The 4 Rimfire drillholes which intersected limited to no granite and/or pegmatite returned strongly anomalous copper (i.e. > 250ppm) and gold (i.e. > 20ppb), highlighting the opportunity for a significant greenfields discovery. Of the remaining 11 Rimfire drillholes, 10 drill holes were dominated by granite and/or pegmatites and 1 drill hole was abandoned in the cover.

The Rimfire drill intersections remain open in all directions, with these reconnaissance style RC drill holes generally 440 to 630m apart or isolated (i.e. > 1.5km from closest drill hole). The average depth of the weakly lithified/'free-digging' post mineralisation cover at Rimfire is 43m depth and therefore the 15 vertical drill holes penetrate the prospective basement by an average depth of just 54m.

The Rimfire area consists of a sub-circular granitic intrusion (or pluton), with an approximate diameter of 5 to 6km, and a number of associated magnetic high anomalies (both linear and tabular in form), and various VTEM electromagnetic conductivity anomalies and 'erratic' IP chargeability anomalies. Large geophysically prospective areas associated with the sub-circular Rimfire granitic pluton remain completely unexplored; including an aerially extensive (4.0km x 1.4km) magnetic high anomaly modelled as being flat lying at depth beneath recent drill holes. This anomaly is one of several high priority Rimfire targets for large Reduced Intrusion Related copper-gold deposits (RIRD) including skarn style mineral systems.

The Rimfire 2016 Induced Polarisation (IP) survey is considered to have been largely ineffective possibly due to the adverse effects of resistive cover and/or fresh ground water, with the 2011 heliborne electromagnetic survey (VTEM) also potentially impeded by these conditions. Therefore, future exploration of the Rimfire area may involve Aircore style drilling  $\pm$  direct

testing of magnetic anomalies similar to the approach which lead to the discovery of the Calibre gold-copper-silver-tungsten deposit by the Company in 2012.



**Figure 2: Rimfire area showing location of widespread reconnaissance vertical RC drill holes testing various geophysical targets.**

**NB:** Also shows Antipa tenements over Airborne magnetic image (150m flight-line spacing at an altitude of 30m; Pseudo-colour Half Vertical Derivative, Reduced to Pole, northeast sun illumination) Regional GDA94 / MGA Zone 51 co-ordinates, 1km grid.

### Blue Steel Summary

At Blue Steel a total of 5 RC drill holes for 1,004m (ranging in depth from 99m to 291m with an average of 200m), for which assay results are available, and a single 661.0m diamond drillhole (awaiting results), were completed. Drilling would appear not to have explained the Blue Steel IP chargeability anomaly; i.e. insufficient sulphides of any nature and/or no black shale or other IP “red herrings”/false positives intersected which could explain the IP anomaly. Available assay results for the 6 RC drill holes (including RC pre-collar) returned very limited and very weak zinc and gold anomalism.

Aided by inputs acquired from the recent drilling, 3D isosurface modelling of the Blue Steel 2D-IP data was undertaken which suggests that the large Blue Steel IP anomaly may be deeper

than originally anticipated and could potentially be located within and/or proximal to the interpreted extensions of the east dipping Magnum Gabbro (which is the dominant host of the Magnum gold-copper mineralisation) along trend to the south of the Calibre gold-copper deposit, and that the IP anomaly may remain effectively untested. In addition, the Blue Steel IP anomaly also remains open to the south.

Evaluation is ongoing and pending the assay results for the diamond drill hole, although these assay results are not expected to show any material mineralisation given the lack of significant sulphides present.

### **Meekus Summary**

In total 5 RC drill holes were completed for 1,421m (ranging in depth from 183m to 357m with an average of 284m) across the Meekus IP chargeability anomaly target. Assay results are available for the first 3 drill holes which returned limited and relatively weak zinc, lead and silver anomalism.

The limited sulphides intersected at Meekus would appear to be insufficient to explain the IP anomaly; i.e. insufficient sulphides of any nature and/or no black shale or other IP “red herrings”/false positives intersected which could explain the IP anomaly. Aided by inputs acquired from the recent drilling, 3D isosurface modelling of the Meekus 2D-IP data was undertaken which suggests that the IP anomaly is > 1,200m long, variably east dipping and plunging shallowly to the south, and may be deeper than originally anticipated and so may remain untested. Evaluation is ongoing and pending the assay results for the final 2 RC drill holes although these assay results are not expected to show any material mineralisation given the lack of significant sulphides present.

The Meekus magnetic target, which is similar to the magnetic anomaly which led to the discovery of the Calibre deposit, remains a valid and untested target.

### **Corker Summary**

Single 117m RC vertical drill hole which was abandoned prior to target depth due to drilling equipment issues. Anomalous zinc, gold, tungsten and lead. The drill hole target was the interpreted up dip extensions to the Corker stratabound/bedding parallel high-grade polymetallic base and precious metal mineralisation, which remains a valid and untested target.

### **Katinka Summary**

Single 99m vertical RC drill hole; no significant results.

### **Le Tigre, Rufus, Babushka, Ballstein, Hansel Summary**

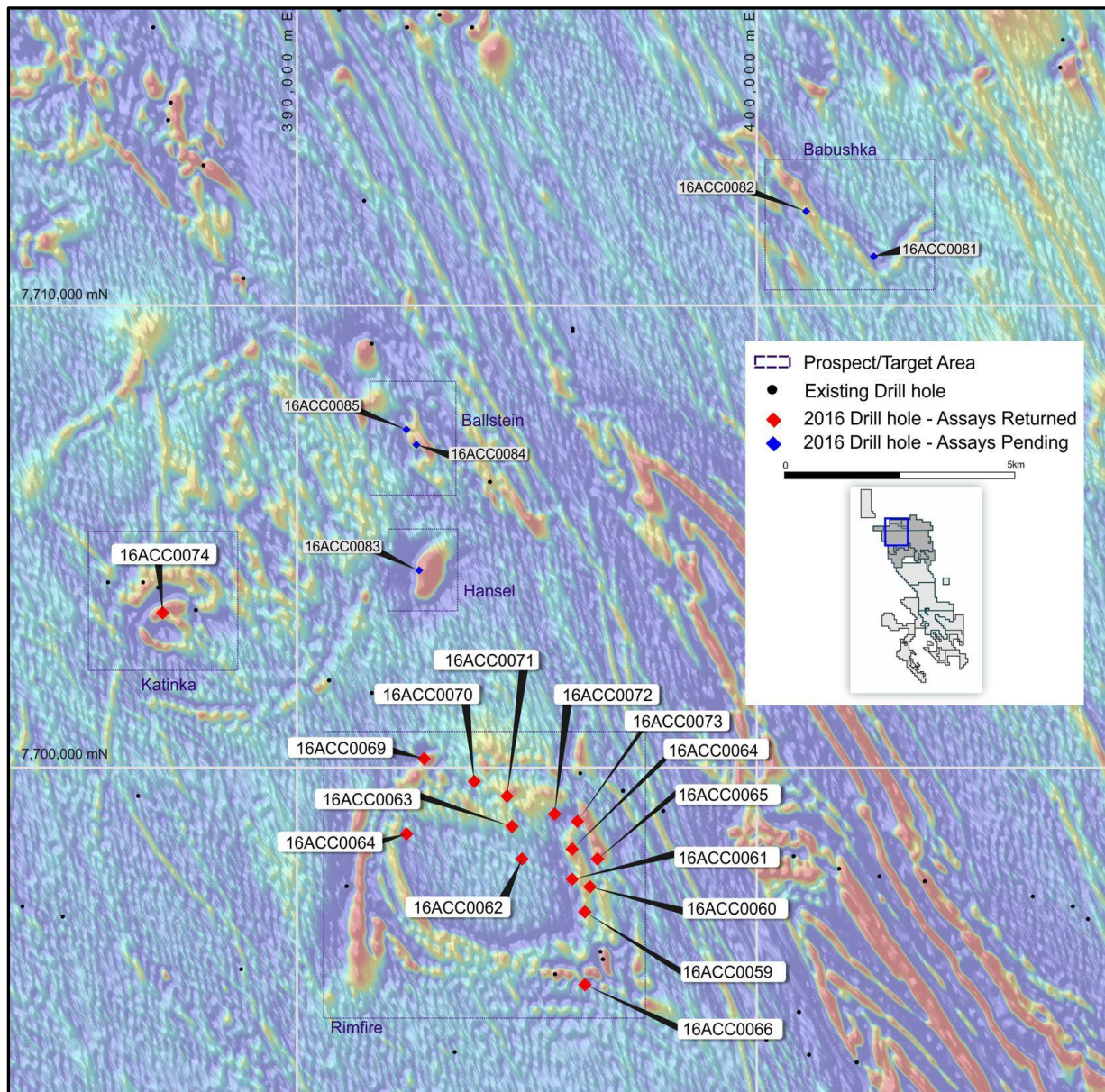
A total of 7 drill holes, 1,125m at an average depth of 160m, were completed at the Le Tigre, Rufus, Babushka, Ballstein, Hansel targets. Analytical results are pending.

### **Timing of Results and Future Exploration Activities**

The remaining assay batches are expected over the next several weeks and announcements will be made periodically as assays are received.

The Rimfire reconnaissance RC drilling results have highlighted an exciting exploration opportunity with follow-up drilling based exploration required. The Blue Steel and Meekus IP anomalies remain unexplained and require further evaluation.

The Company continues to review and evaluate the 2016 exploration data which will form the design basis for the 2017 exploration programme.



**Figure 3: Western region of Citadel Project showing location of drill holes testing geophysical targets.**  
 NB: Also shows Antipa tenements over Airborne magnetic image (150m flight-line spacing at an altitude of 30m; Pseudo-colour Half Vertical Derivative, Reduced to Pole, northeast sun illumination) Regional GDA94 / MGA Zone 51 co-ordinates, 10km grid.

**Western Australian Government Funding Received for Rimfire Area Drilling Programme**

The Company has received funding approval for up to \$148,000 from the Western Australian Government’s Exploration Incentive Scheme (EIS co-funding) for exploration at its Rimfire area. Antipa would like to acknowledge the ongoing support provided by the WA Government through its EIS programme for the Company’s exploration programmes. Since listing the

Company has successfully applied for six WA Government EIS co-funded drilling grants. The EIS co-funded drilling programme preferentially funds high quality, technical and economically based projects that promote new exploration concepts and are assessed by a panel on the basis of geoscientific and exploration targeting merit.

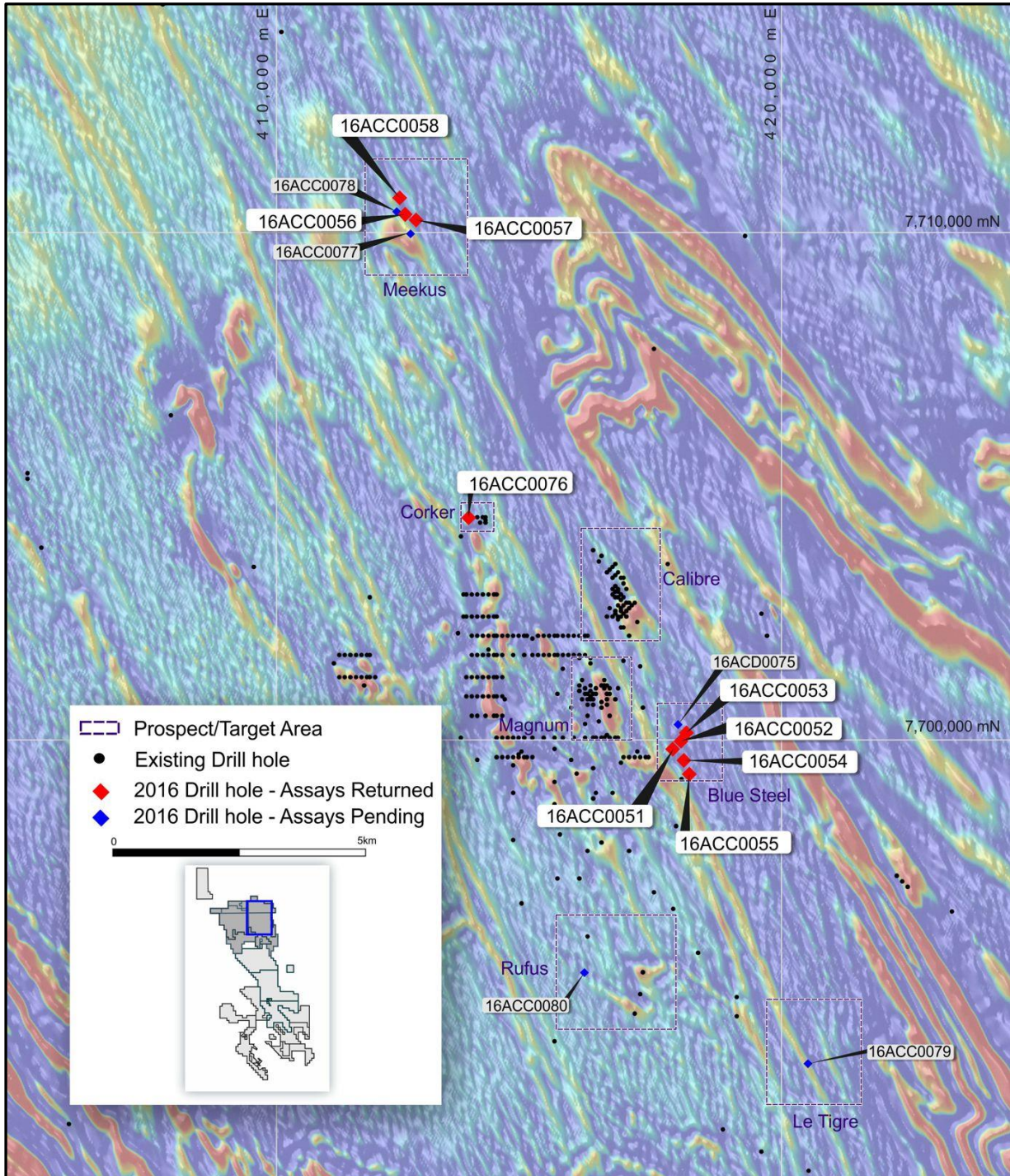


Figure 4: Eastern region of Citadel Project showing deposits and location of drill holes testing geophysical targets.

NB: Also shows Antipa tenements over Airborne magnetic image (150m flight-line spacing at an altitude of 30m; Pseudo-colour Half Vertical Derivative, Reduced to Pole, northeast sun illumination) Regional GDA94 / MGA Zone 51 co-ordinates, 10km grid.

For further information, please visit [www.antipaminerals.com.au](http://www.antipaminerals.com.au) or contact:

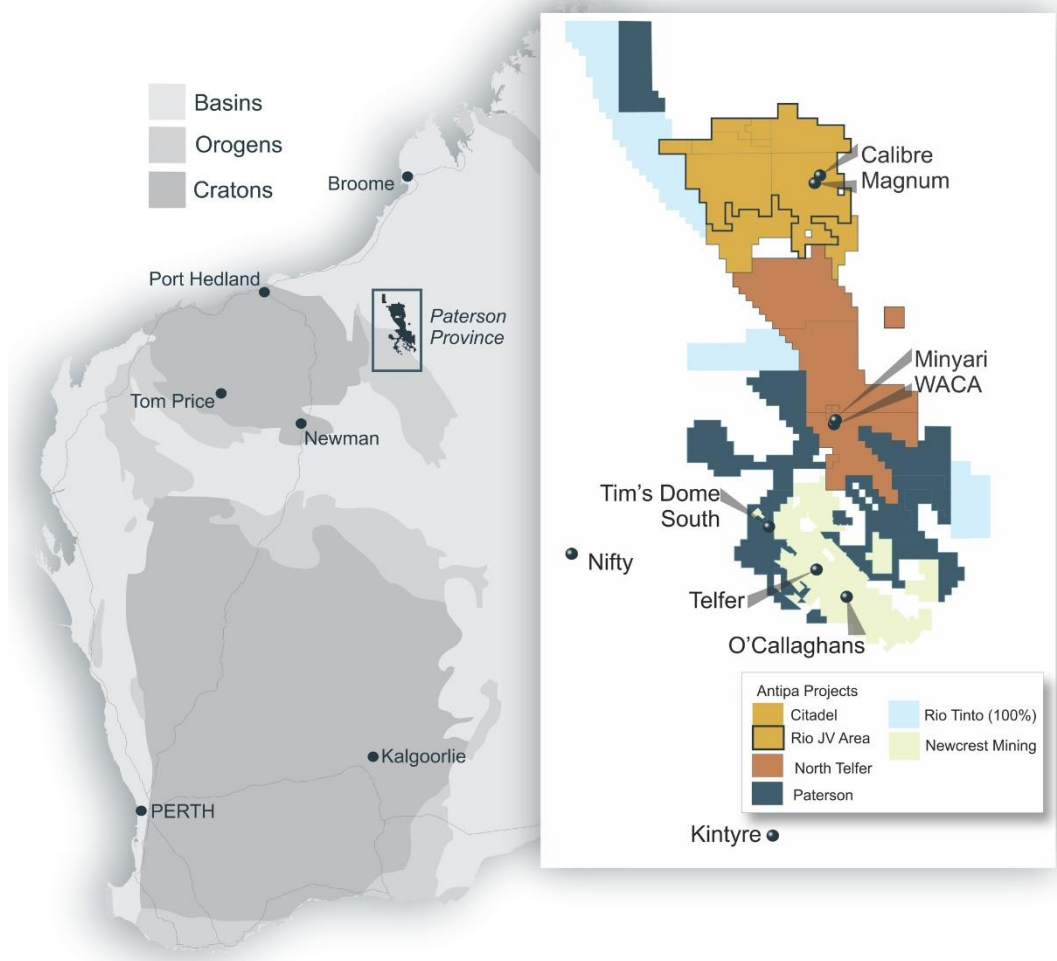
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**About Antipa Minerals:**

Antipa Minerals Ltd is an Australian public company which was formed with the objective of identifying under-explored mineral projects in mineral provinces which have the potential to host world class mineral deposits, thereby offering high leverage exploration potential. The Company owns a 1,335km<sup>2</sup> package of prospective granted tenements in the Proterozoic Paterson Province of Western Australia known as the Citadel Project. The Citadel Project is located approximately 75km north of Newcrest’s Telfer gold-copper-silver mine and includes the gold-copper-silver-tungsten Mineral Resources at the Calibre and Magnum deposits and high-grade polymetallic Corker deposit. Under the terms of a Farm-in and Joint Venture Agreement with Rio Tinto Exploration Pty Limited (“Rio Tinto”), a wholly owned subsidiary of Rio Tinto Limited, Rio Tinto can fund up to \$60 million of exploration expenditure to earn up to a 75% interest in Antipa’s Citadel Project.

The Company has an additional 1,310km<sup>2</sup> of granted exploration licences, known as the North Telfer Project which hosts the high-grade gold-copper Minyari and WACA deposits and extends its ground holding in the Paterson Province to within 20km of the Telfer Gold-Copper-Silver Mine and 30km of the O’Callaghans tungsten and base metal deposit. The Company has also acquired, from the Mark Creasy controlled company Kitchener Resources Pty Ltd, additional exploration licences in the Paterson Province which are now all granted and cover 1,573km<sup>2</sup> and the Company owns a further 138km<sup>2</sup> of exploration licences (including both granted tenements and applications), which combined are known as the Paterson Project, which comes to within 3km of the Telfer mine and 5km of the O’Callaghans deposit.





**Competent Person's Statement:**

The information in this report that relates to Exploration Results is based on and fairly represents information and supporting documentation compiled by Mr Roger Mason, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Mason is a full-time employee of the Company. Mr Mason is the Managing Director of Antipa Minerals Limited, is a substantial shareholder of the Company and is an option holder of the Company. Mr Mason has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Mason consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Various information in this report which relates to Exploration Results other than in relation to the details of the Citadel Project 2016 Exploration Programme Phase 2 information reported here is extracted from the following:

- Report entitled "*Citadel Project – VTEM Electromagnetic Survey Extends Existing Magnum Target Area and Defines New Generation of High Priority Targets*" created on 2 September 2011;
- Report entitled "*Citadel Project - Magnum Drilling Update*" created on 10 September 2012;
- Report entitled "*Citadel Project - Phase 2 Drilling Programme - Corker Assays*" created on 20 December 2012;
- Report entitled "*Citadel Project - Calibre Deposit - Major Gold-Copper Discovery*" created on 4 February 2013;
- Report entitled "*Calibre & Magnum Mineral Resources JORC 2012 Updates*" created on 23 February 2015;
- Report entitled "*Rio Tinto – Antipa Citadel Project Joint Venture*" created on 9 October 2015;
- Report entitled "*Calibre 2015 Drilling Phase 2 Results*" created on 16 December 2015;
- Report entitled "*Citadel Project Exploration Update*" created on 15 March 2016;
- Report entitled "*Citadel Project Commencement of IP Survey*" created on 24 March 2016;
- Report entitled "*Citadel Project IP Survey Identifies Multiple Chargeability Anomalies along 20km Calibre Trend*" created on 24 June 2016;
- Report entitled "*Citadel Project – 2016 RC Drilling Programme*" created on 10 October 2016;
- Report entitled "*Citadel Project - RC Drilling Programme Commences*" created on 28 October 2016; and
- Report entitled "*North Telfer and Citadel Exploration Programme Update*" created on 16 November 2016.

Which are available to view on [www.antipaminerals.com.au](http://www.antipaminerals.com.au) and [www.asx.com.au](http://www.asx.com.au). The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements.

**Forward-Looking Statements:**

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Antipa Mineral Ltd's planned exploration programme and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "estimate," "expect," "intend," "may," "potential," "should," and similar expressions are forward-looking statements. Although Antipa Minerals Ltd believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.

Table 1: Citadel Project – 2016 Phase 2 Drillhole Collar Locations (MGA Zone 51/GDA 94)

Hole ID	Target	Northing (m)	Easting (m)	RL (m)	Hole Depth (m)	Azimuth (°)	Dip (°)	Assay Status
<b>Reverse-Circulation (RC) Drillholes</b>								
16ACC0051	Blue Steel	7,699,954	417,965	265	171.0	225	-60	Received
16ACC0052	Blue Steel	7,700,100	418,105	265	291.0	225	-60	Received
16ACC0053	Blue Steel	7,700,240	418,250	265	99.0	225	-60	Received
16ACC0054	Blue Steel	7,699,710	418,170	265	248.0	225	-60	Received
16ACC0055	Blue Steel	7,699,435	418,270	265	195.0	225	-60	Received
16ACC0056	Meekus	7,710,478	412,692	265	183.0	300	-60	Received
16ACC0057	Meekus	7,710,387	412,871	265	284.0	300	-60	Received
16ACC0058	Meekus	7,710,806	412,571	265	249.0	300	-60	Received
16ACC0059	Rimfire	7,696,997	396,365	265	99.0	0	-90	Received
16ACC0060	Rimfire	7,697,539	396,499	265	99.0	0	-90	Received
16ACC0061	Rimfire	7,697,700	396,091	265	123.0	0	-90	Received
16ACC0062	Rimfire	7,698,125	395,011	265	99.0	0	-90	Received
16ACC0063	Rimfire	7,698,842	394,779	265	99.0	0	-90	Received
16ACC0064	Rimfire	7,698,329	396,081	265	99.0	0	-90	Received
16ACC0065	Rimfire	7,698,108	396,639	265	99.0	0	-90	Received
16ACC0066	Rimfire	7,695,423	396,364	265	99.0	0	-90	Received
16ACC0067	Rimfire	7,698,663	392,504	265	99.0	0	-90	Received
16ACC0068	Rimfire	7,700,325	392,915	265	39.0	0	-90	Received
16ACC0069	Rimfire	7,700,325	392,915	265	99.0	0	-90	Received
16ACC0070	Rimfire	7,699,798	394,002	265	99.0	0	-90	Received
16ACC0071	Rimfire	7,699,503	394,714	265	99.0	0	-90	Received
16ACC0072	Rimfire	7,699,102	395,731	265	99.0	0	-90	Received
16ACC0073	Rimfire	7,698,925	396,224	265	99.0	0	-90	Received
16ACC0074	Katinka	7,703,465	387,202	265	99.0	0	-90	Received
16ACC0076	Corker	7,704,500	413,900	265	117.0	315	-60	Received
16ACC0077	Meekus	7,710,109	412,774	265	348.0	0	-90	Pending
16ACC0078	Meekus	7,710,569	412,514	265	357.0	0	-90	Pending
16ACC0079	Le Tigre	7,693,694	420,636	265	297.0	0	-90	Pending
16ACC0080	Rufus	7,695,531	416,206	265	159.0	0	-90	Pending
16ACC0081	Babushka	7,711,196	402,650	265	159.0	0	-90	Pending
16ACC0082	Babushka	7,712,202	401,178	265	75.0	0	-90	Pending
16ACC0083	Hansel	7,704,386	392,792	265	129.0	0	-90	Pending
16ACC0084	Ballstein	7,707,432	392,527	265	153.0	0	-90	Pending
16ACC0085	Ballstein	7,707,098	392,737	265	153.0	0	-90	Pending
<b>Diamond Drillholes</b>								
16ACD0075	Blue Steel	7,700,416	418,082	265	661.0	225	-65	RC Pre-collared Received

Table 2: Citadel Project – 2016 Phase 2 Drill Intersections

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Copper (ppm)	Gold (g/t)	Silver (g/t)	Zinc (ppm)
16ACC0051	Blue Steel	137.0	138.0	1.0	305	0.00	0.08	140
16ACC0051	Blue Steel	143.0	146.0	3.0	119	0.00	0.05	197
16ACC0052	Blue Steel	168.0	172.0	4.0	77	0.06	0.03	54
16ACC0053	Blue Steel	84.0	85.0	1.0	11	0.00	0.04	789
16ACC0054	Blue Steel	No Significant Intercepts						
16ACC0055	Blue Steel	No Significant Intercepts						
16ACC0056	Meekus	No Significant Intercepts						
16ACC0057	Meekus	176.0	180.0	4.0	3	0.00	0.04	221
16ACC0057	Meekus	188.0	192.0	4.0	29	0.00	0.17	243
16ACC0057	Meekus	226.0	227.0	1.0	491	0.01	0.17	116
16ACC0057	Meekus	260.0	273.0	13.0	50	0.00	0.12	204
16ACC0058	Meekus	No Significant Intercepts						
16ACC0059	Rimfire	34.0	35.0	1.0	166	0.01	0.01	391
16ACC0059	Rimfire	71.0	72.0	1.0	298	0.02	0.05	115
16ACC0059	Rimfire	74.0	75.0	1.0	393	0.02	0.08	168
16ACC0060	Rimfire	No Significant Intercepts						
16ACC0061	Rimfire	40.0	44.0	4.0	29	0.07	0.07	4
16ACC0061	Rimfire	72.0	76.0	4.0	107	0.05	0.03	58
16ACC0061	Rimfire	80.0	81.0	1.0	258	0.07	0.03	95
16ACC0061	Rimfire	82.0	83.0	1.0	344	0.02	0.04	138
16ACC0061	Rimfire	86.0	109.0	23.0	1,231	0.03	0.12	133

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Copper (ppm)	Gold (g/t)	Silver (g/t)	Zinc (ppm)
	Including	88.0	99.0	11.0	<b>1,785</b>	<b>0.05</b>	0.17	134
16ACC0061	Rimfire	116.0	117.0	1.0	<b>284</b>	0.02	0.04	132
16ACC0062	Rimfire	No Significant Intercepts						
16ACC0063	Rimfire	72.0	73.0	1.0	<b>679</b>	0.01	<b>0.19</b>	<b>221</b>
16ACC0064	Rimfire	40.0	41.0	1.0	<b>302</b>	<b>0.18</b>	<b>0.36</b>	84
16ACC0064	Rimfire	44.0	46.0	2.0	<b>432</b>	0.00	0.08	<b>200</b>
16ACC0064	Rimfire	48.0	55.0	7.0	174	0.01	0.06	<b>216</b>
16ACC0064	Rimfire	57.0	58.0	1.0	252	0.01	0.04	143
16ACC0064	Rimfire	62.0	63.0	1.0	291	0.00	0.08	113
16ACC0064	Rimfire	67.0	85.0	18.0	<b>1,008</b>	0.04	<b>0.37</b>	<b>254</b>
	Including	76.0	81.0	5.0	<b>1,402</b>	0.03	<b>0.44</b>	172
16ACC0064	Rimfire	86.0	91.0	5.0	<b>400</b>	0.00	0.11	139
16ACC0064	Rimfire	95.0	98.0	3.0	118	0.01	0.13	<b>600</b>
16ACC0065	Rimfire	No Significant Intercepts						
16ACC0066	Rimfire	60.0	71.0	11.0	73	0.00	0.16	<b>162 Pb</b>
16ACC0067	Rimfire	No Significant Intercepts						
16ACC0068	Rimfire	No Significant Intercepts – Drill Hole Abandoned in Cover						
16ACC0069	Rimfire	48.0	50.0	2.0	78	0.01	<b>0.32</b>	53
16ACC0069	Rimfire	52.0	56.0	4.0	40	0.00	0.03	<b>373</b>
16ACC0069	Rimfire	92.0	94.0	2.0	<b>282</b>	0.00	0.07	94
16ACC0070	Rimfire	55.0	56.0	1.0	<b>26</b>	<b>0.34</b>	0.07	10
16ACC0071	Rimfire	55.0	56.0	1.0	<b>316</b>	0.03	0.09	62
16ACC0071	Rimfire	56.0	81.0	25.0	<b>898</b>	0.04	<b>0.25</b>	<b>381</b>
	Including	56.0	62.0	6.0	<b>1,462</b>	<b>0.05</b>	0.15	<b>748</b>
16ACC0071	Rimfire	81.0	82.0	1.0	<b>322</b>	0.01	0.03	116
16ACC0071	Rimfire	87.0	88.0	1.0	<b>496</b>	0.01	0.10	88
16ACC0072	Rimfire	No Significant Intercepts						
16ACC0073	Rimfire	41.0	43.0	2.0	217	0.02	0.05	<b>123 W</b>
16ACC0073	Rimfire	43.0	65.0	22.0	<b>395</b>	<b>0.05</b>	0.06	<b>232</b>
	Including	44.0	46.0	2.0	<b>1,785</b>	<b>0.05</b>	0.04	<b>298</b>
16ACC0073	Rimfire	65.0	83.0	18.0	<b>345</b>	0.01	0.07	180
16ACC0074	Katinka	No Significant Intercepts						
16ACC0076	Corker	94.0	112.0	18.0	52	0.01	0.08	<b>208</b>
16ACD0075	Blue Steel	No Significant Intercepts – RC Pre-Collar Only						

**Notes (Intersection Table 2 above):** Intersections are composited for the purposes of highlighting geochemical anomalism/trends from individual assays using the following criteria which are considered relevant for both the reconnaissance nature of the drilling programme and metal indicators for various known mineralisation styles within the Paterson Province:

Intersection Interval = Nominal cut-off grade scenarios:

- $\geq 250$  ppm copper which also satisfy a minimum down-hole intersection of  $\geq 1$  metre; and/or
- $\geq 0.05$  g/t gold which also satisfy a minimum down-hole intersection of  $\geq 1$  metre; and/or
- $\geq 0.20$  g/t silver which also satisfy a minimum down-hole intersection of  $\geq 1$  metre; and/or
- $\geq 200$  ppm zinc which also satisfy a minimum down-hole intersection of  $\geq 1$  metre; and/or
- $\geq 150$  ppm lead which also satisfy a minimum down-hole intersection of  $\geq 1$  metre; and/or
- NB: In some instances zones grading less than the cut-off grade/s have been included in calculating composites or to highlight mineralisation trends.
- No top-cutting has been applied to assay results.

CITADEL PROJECT

Section 1 – Sampling Techniques and Data (Criteria in this section shall apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
<p><i>Sampling techniques</i></p>	<ul style="list-style-type: none"> <li>• <i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>In cases where ‘industry standard’ work has been done this would be relatively simple (e.g. ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<p><b>2016 Reverse Circulation (RC) and Diamond Drilling</b></p> <ul style="list-style-type: none"> <li>• The drilling programme involved the completion of 34 (including two drill holes abandoned in the Permian cover sequence i.e. 16ACC0068 and 16ACC0082) Reverse Circulation (RC) drill holes, totaling 5,215m, with an average maximum drill hole depth of 153m, and 1 diamond drill hole (16ACD0075) totaling 661m (including 99m RC pre-collar).</li> <li>• Assays available for the first 25 RC drill holes, totaling 3,385m, average maximum drill hole depth of 135m, and the 99m RC pre-collar for the diamond drill hole.</li> <li>• The drilling programme investigated a number of targets including:             <ul style="list-style-type: none"> <li>○ 8 targets primarily based on IP Chargeability anomalies;</li> <li>○ Rimfire area targets with varied geophysical target criteria (i.e. IP and/or magnetic and/or VTEM electromagnetic conductivity anomalism);</li> <li>○ 1 drillhole testing the strongest magnetic high anomaly in the Citadel Project, i.e. ‘Hansel’ (NB: The Hansel RC drill hole failed to reach the target depth); and</li> <li>○ 2 drillholes testing 2 geology targets, i.e. ‘Katinka’ and ‘Corker’ (NB: The Corker RC drill hole failed to reach the target depth).</li> </ul> </li> </ul> <p><i>RC Sampling:</i></p> <ul style="list-style-type: none"> <li>• RC Sampling was carried out under Antipa protocols and QAQC procedures as per industry best practice.</li> <li>• RC samples were drilled using a 140mm diameter face sampling hammer and sampled on intervals of 1.0m using a rig mounted cone splitter from which a 2 kg (average) sample which was pulverised at the laboratory to produce material for assay.</li> <li>• Compositing of unmineralised regions (guided by Olympus portable XRF field analysis) of between 2 to 4m was undertaken via combining “Spear” samples of the unmineralised sample intervals to generate a 2 kg (average) sample which was pulverised at the laboratory to produce material for assay.</li> </ul> <p><i>Diamond Drill Core Sampling:</i></p> <ul style="list-style-type: none"> <li>• Sampling was carried out under Antipa protocols and QAQC procedures as per industry best practice.</li> <li>• Core sampling is on intervals from 0.1 to 2.0m and selected on the basis of geological boundaries.</li> <li>• For sample intervals less than 1.5m in length half core samples are submitted for assay.</li> <li>• For sample intervals greater than 1.5m in length quarter core samples are submitted for assay.</li> <li>• Blue Steel diamond core was drilled with NQ2 size and was sampled on intervals ranging from 0.15 to 1.25m in length (i.e. all samples were NQ2 half core).</li> <li>• Core samples were sent to ALS Laboratory Group in Perth, where they were dried, crushed, pulverised and split to produce material for assay.</li> </ul>

Criteria	JORC Code explanation	Commentary
Drilling techniques	<ul style="list-style-type: none"> <li>• <i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></li> </ul>	<p><b>2016 Reverse Circulation Drilling</b></p> <ul style="list-style-type: none"> <li>• A total of 34 RC drill holes (excluding 99m RC pre-collars for 1 diamond drillhole) were drilled totaling 5,215m with average maximum drill hole depth of 153m.</li> <li>• All drill holes were completed using 140mm RC face sampling hammer drill bit from surface to total drill hole depths of between 39m to 357m.</li> </ul> <p><b>2016 Diamond Drilling</b></p> <ul style="list-style-type: none"> <li>• A single (1) diamond drill hole was drilled at the Blue Steel target during the drilling programme with average maximum drill hole depth of 661.0m (including RC pre-collar).</li> <li>• Diamond drill holes were completed using NQ2 sized core. RC pre-collar depth was 99m and maximum drill hole depth was 661.0m.</li> <li>• The core is oriented using a Reflex ACT electronic orientation tool.</li> <li>• The diamond drill hole was collared towards MGA 225° (magnetic) and at an inclination angle of -65° to optimally intersect the known mineralisation and “bedding” trends in the general (eastern) area and Blue Steel IP target region.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></li> </ul>	<p><b>RC Drill Samples</b></p> <ul style="list-style-type: none"> <li>• RC sample recovery was recorded via visual estimation of sample volume.</li> <li>• RC sample recovery typically ranges from 90 to 100%, with only very occasional samples with less than 70% recovery.</li> <li>• RC sample recovery was maximized by endeavoring to maintain a dry drilling conditions as much as practicable; the RC samples were almost exclusively dry.</li> <li>• All samples were split on a 1m interval using a rig-mounted cone splitter. Adjustments were made to ensure representative 2 to 3kg sample volumes were collected.</li> <li>• Relationships between recovery and grade are not evident and are not expected given the generally excellent and consistently high sample recovery.</li> <li>• RC sample recovery and sample quality was recorded via visual estimation of sample volume and condition of the drill spoils.</li> <li>• RC results are generated for the purpose of exploration and potentially for Mineral Resource estimations.</li> </ul> <p><b>Diamond Drill Core Samples</b></p> <ul style="list-style-type: none"> <li>• Core recovery is routinely recorded as a percentage. Overall core recoveries averaged over 99.5% and there are no core loss issues or significant sample recovery problems except for occasional very localised/limited regions.</li> <li>• Diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers.</li> <li>• Drillers used appropriate measures to maximise diamond sample recovery.</li> <li>• Whilst no assays are currently available for the diamond drill hole it is unlikely that any detailed analysis to determine the relationship between sample recovery and/or grade will be warranted</li> </ul>

Criteria	JORC Code explanation	Commentary
Logging	<ul style="list-style-type: none"> <li>• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>• The total length and percentage of the relevant intersections logged.</li> </ul>	<p>as the mineralisation is defined by diamond core drilling which has high recoveries.</p> <p><b>RC Drill Logging</b></p> <ul style="list-style-type: none"> <li>• All RC and diamond material is logged.</li> <li>• Logging includes both qualitative and quantitative components.</li> <li>• All logging is entered directly into a notebook computer using the Antipa Proprietary Logging System which is based on Microsoft Excel. The logging system uses standard look up tables that does not allow invalid logging codes to be entered. Further data validation is carried out during upload to Antipa's master Access SQL database.</li> <li>• Geological logging of 100% of all RC sample intervals was carried out recording colour, weathering, lithology, mineralogy, alteration, veining and sulphides.</li> <li>• Selected RC sample intervals were measured for magnetic susceptibility using a handheld Magnetic Susceptibility meter.</li> <li>• RC samples are generally analyzed in the field using a Portable XRF Device (Olympus) for the purposes of geochemical and lithological interpretation and the selection of sampling intervals.</li> </ul> <p><b>Diamond Drill Core Logging</b></p> <ul style="list-style-type: none"> <li>• Logging includes both qualitative and quantitative components.</li> <li>• All logging is entered directly into a notebook computers using the Antipa Proprietary Logging System which is based on Microsoft Excel. The logging system uses standard look up tables that does not allow invalid logging codes to be entered. Further data validation is carried out during upload to Antipa's master Access SQL database.</li> <li>• Geological logging of 100% of all drill core was carried out recording colour, weathering, lithology, mineralogy, alteration, veining, sulphides and structure.</li> <li>• Geotechnical logging of all core was carried out for Recovery, RQD and Fracture Frequency.</li> <li>• Information on structure type, dip, dip direction, alpha angle, beta angle, gamma angle, texture and fill material is stored in the Company's technical database.</li> <li>• All drill holes were logged in full including the RC pre-collar component of the diamond drillholes.</li> <li>• Core was photographed both wet and dry.</li> <li>• In 2013 Snowden considered that the Company's logging is carried out in sufficient detail to meet the requirements of the reporting of exploration results and resource estimation and mining studies.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>• If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>• For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>• Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results</li> </ul>	<p><b>RC Samples</b></p> <ul style="list-style-type: none"> <li>• RC samples for all drill holes were drilled using a 140mm diameter face sampling hammer and split on intervals of 1.0m using a rig mounted cone splitter from which a 3 kg (average) sample which was pulverised at the laboratory pulverised to produce material for assay.</li> <li>• Compositing of unmineralised regions (guided by Portable XRF / Olympus field analysis) of between 2 to 4m was undertaken via combining "Spear" samples of the unmineralised sample intervals to generate a 3 kg (average) sample which was pulverised at the laboratory to produce material for assay.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>for field duplicate/second-half sampling.</i></p> <ul style="list-style-type: none"> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Field duplicate samples were collected for all RC drill holes.</li> </ul> <p><b>Diamond Drilling Core Samples</b></p> <ul style="list-style-type: none"> <li>• Diamond core was drilled with NQ2 size and sampled on intervals from 0.15 to 1.25m selected on the basis of geological boundaries.</li> <li>• Diamond core is sampled on a nominal 1.0m sample interval within unmineralised zones and on 0.1 to 1.25m intervals within the mineralised zones.</li> <li>• Sample intervals are adjusted so that samples do not cross lithological boundaries and samples are collected from the same side of the core.</li> <li>• Samples are collected from half-core using a diamond saw located at the Company's field facility.</li> <li>• Samples are selected to weigh less than 3kg to ensure total preparation at the pulverisation stage.</li> </ul> <p><b>RC and diamond core sample preparation</b></p> <ul style="list-style-type: none"> <li>• Sample preparation of RC and diamond drilling core samples was completed at ALS Laboratory Group in Perth following industry best practice in sample preparation involving oven drying, coarse crushing of the sample using a primary crusher down to crushed size of approximately 70% passing 2mm, followed by pulverisation of a rotary split 1 kg aliquot to a grind size of approximately 85% passing 75 µm via a ring mill pulveriser using a carbon steel ring set. The pulverised sample is then further split into a sub-sample/s for analysis.</li> <li>• The sample sizes are considered appropriate to suitably represent sample material derived from this type of reconnaissance (geochemical) drill based exploration programme.</li> </ul>
<p><i>Quality of assay data and laboratory tests</i></p>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li>• <i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The sample preparation technique for RC and diamond drill core samples is documented by Antipa Mineral Ltd's standard procedures documents and is in line with industry standards in sample preparation.</li> <li>• The sample sizes are considered appropriate to represent mineralisation.</li> <li>• Sample preparation checks for fineness were carried out by the laboratory as part of its internal procedures.</li> </ul> <p><b>Analytical Techniques:</b></p> <ul style="list-style-type: none"> <li>• All samples were dried, crushed, pulverised and split to produce a sub-sample for a 0.25g sample which are digested and refluxed with hydrofluoric, nitric, hydrochloric and perchloric acids ("four acid digest") suitable for silica based samples. This digest is considered to approach a total dissolution for most minerals. Analytical methods used were Inductively Coupled Plasma Atomic Emission Spectroscopy / Mass Spectrometry (ICP-AES / ICP-MS) for Ag, Al, As, Au, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Pd, Pt, Rb, Re, S, Sb, Sc, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn and Zr.</li> <li>• Note that based on the analytical technique described above, the assay results for Au, Pd and Pt are considered semi-quantitative in nature and with the Au results being determined from only 0.25g of material dissolved sample material they must be treated with caution. The Au, Pd and Pt data are obtained by this method for the purposes of</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>identifying low level geochemical anomalism.</p> <ul style="list-style-type: none"> <li>• A lead collection Fire Assay on a 30g sample with Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES) undertaken to determine gold content with a detection limit of 0.001ppm (for samples grading &gt; 35 ppb Au).</li> <li>• No geophysical tools were used to determine any element concentrations in this report.</li> <li>• A handheld portable XRF analyser (Olympus Delta 50) device is used in the field to investigate and record geochemical data for internal analysis. However, due to “spatial” accuracy/repeatability issues this data is not publicly reported.</li> <li>• Field QC procedures involve the use of commercial certified reference material (CRM’s) for assay standards and blanks. Standards are inserted every 25 samples. The grade of the inserted standard is not revealed to the laboratory.</li> <li>• Field duplicates/repeat QC samples was utilised during the RC drilling programme with nominally two to three duplicate RC field samples per drill hole.</li> <li>• Inter laboratory cross-checks analysis programmes have not been conducted at this stage.</li> <li>• In addition to Antipa supplied CRM’s, ALS Laboratory Group includes in each sample batch assayed certified reference materials, blanks and up to 10% replicates.</li> <li>• Selected anomalous samples are re-digested and analysed to confirm results.</li> </ul>
<p><i>Verification of sampling and assaying</i></p>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Significant intersections of the drilling have been visually verified by the Exploration Manager.</li> <li>• All logging is entered directly into a notebook computer using the Antipa Proprietary Logging System which is based on Microsoft Excel. The logging system uses standard look up tables that does not allow invalid logging codes to be entered. Further data validation is carried out during upload to Antipa’s master SQL database.</li> <li>• No adjustments or calibrations have been made to any assay data collected.</li> </ul>
<p><i>Location of data points</i></p>	<ul style="list-style-type: none"> <li>• <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• km = kilometre; m = metre; mm = millimetre.</li> <li>• Drill hole collar locations are surveyed using a handheld Garmin 64S GPS which has an accuracy of ± 3m.</li> <li>• The drilling co-ordinates are all in GDA94 MGA Zone 51 co-ordinates.</li> <li>• The Company did not adopt or reference any specific local grid/s across the Citadel Project during this 2016 drilling Programme.</li> <li>• The topographic surface has been defaulted to 265m RL.</li> <li>• Rig orientation was checked using Suunto Sighting Compass from two directions.</li> <li>• Drill hole inclination was set by the driller using a clinometer on the drill mast and checked by the geologist prior the drilling commencing.</li> <li>• The topographic surface has been compiled using the drill hole collar coordinates.</li> <li>• RC downhole surveys, for vertical drill holes &gt; 150m in depth and all angled drill holes, were undertaken in-hole during drilling using a ‘Reflex EZ Trac Camera’ device at 30 metre intervals with a final survey at the end of the drill hole.</li> <li>• Downhole surveys were checked by the supervising geologist for consistency. If required, readings</li> </ul>



Criteria	JORC Code explanation	Commentary
		<p>were re-surveyed or smoothed in the database if unreliable azimuth readings were apparent.</p> <ul style="list-style-type: none"> <li>Survey details included drill hole dip (<math>\pm 0.25^\circ</math> accuracy) and drill hole azimuth (<math>\pm 0.35^\circ</math> accuracy) Total Magnetic field and temperature.</li> </ul>
<p><i>Data spacing and distribution</i></p>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drill hole locations for all 2016 drill holes are tabulated in the body of this report.</li> </ul> <p><b>2016 RC Drilling</b></p> <ul style="list-style-type: none"> <li>All RC drill holes were reconnaissance in nature and so a nominal drill hole spacing is not relevant. Where more than one drill hole was completed at a specific target area the hole spacing ranged from 200m to 400m and sometimes up to between 600 to 800m north-south and/or east-west.</li> <li>Due to the reconnaissance nature of the programme 26 of the RC drill holes were vertical.</li> <li>8 of the RC drill holes, all located at the Blue Steel and Meekus target areas, are angled towards MGA southwest (<math>225^\circ</math> magnetic) or northwest (<math>300^\circ</math> magnetic) to be approximately perpendicular to the strike of the known dominant mineralisation trends in the general (eastern) area and bedding, and at a suitable angle to the dip of the known dominant mineralisation.</li> <li>These 8 RC drill holes were collared at an inclination angle of <math>-60^\circ</math> to “optimally” intersect the known mineralisation trends in the general (eastern) area or IP target regions.</li> <li>The section spacing is insufficient to establish the degree of geological and grade continuity necessary to support future Mineral Resource estimations.</li> <li>RC drill sample compositing may have been applied for the reporting of some exploration results.</li> </ul> <p><b>2016 Diamond Drilling</b></p> <ul style="list-style-type: none"> <li>A single “isolated” diamond drill hole was completed at the Blue Steel target. The hole was located 316m away from the nearest drill hole.</li> <li>The diamond drill hole was reconnaissance in nature testing the Blue Steel IP target.</li> <li>The Blue Steel diamond drill hole is angled towards MGA southwest (<math>225^\circ</math> magnetic) to be approximately perpendicular to the strike of the known dominant mineralisation trends in the general (eastern) area and bedding, and at a suitable angle to the dip of the known dominant mineralisation.</li> <li>The Blue Steel diamond drill hole was collared at an inclination angle of <math>-65^\circ</math> to “optimally” intersect the known mineralisation trends in the general (eastern) area and IP target region.</li> <li>The drill hole spacing is insufficient to establish the degree of geological and grade continuity necessary to support future Mineral Resource estimations.</li> <li>No sample compositing has been applied for the reporting of exploration results.</li> </ul>
<p><i>Orientation of data in relation to geological structure</i></p>	<ul style="list-style-type: none"> <li><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li><i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and</i></li> </ul>	<ul style="list-style-type: none"> <li>At this stage, it cannot be determined with any certainty if any consistent and/or material bias exists in the 2016 RC drill hole sampling as a result of the drill hole location and/or orientation in relation to possible mineralised structures.</li> <li>At Blue Steel the orientated 2016 diamond drill hole appears to be at a reasonable orientation with respect to the general approximate strike, dip and morphology of bedding and the mineralised</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>reported if material.</i>	<p>structures.</p> <ul style="list-style-type: none"> <li>Both folding and multiple vein directions have been recorded via pre-2016 diamond drilling at several locations within the Citadel Project (i.e. Magnum, Calibre, Colt and Corker).</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>Chain of sample custody is managed by Antipa to ensure appropriate levels of sample security.</li> <li>Samples are stored on site and delivered by Antipa or their representatives to Port Hedland and subsequently by Centurion Transport from Newman to the assay laboratory in Perth.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>Sampling techniques and procedures are regularly reviewed internally, as is the data.</li> <li>Consultants Snowden, during completion of the 2013 Calibre Mineral Resource estimate, undertook a desktop review of the Company's sampling techniques and data management and found them to be consistent with industry standards.</li> </ul>

## CITADEL PROJECT

### Section 2 – Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li><i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></li> <li><i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></li> </ul>	<ul style="list-style-type: none"> <li>The drilling is located wholly within granted Exploration Licenses E45/2874, E45/2876, E45/2877 and E45/2901.</li> <li>Antipa Minerals Ltd has a 100% interest in all tenements and there are no royalties on the tenements (other than WA State government royalties).</li> <li>The Citadel Project (excluding tenement E45/4561) is subject to the Citadel Project Farm-in Agreement with Rio Tinto Exploration Pty Ltd.</li> <li>E45/2876 and E45/2877 are contained completely within land where the Martu People have been determined to hold native title rights. No historical or environmentally sensitive sites have been identified in the area of work.</li> <li>E45/2874 and E45/2901 are contained completely within land where the Nyangumarta People have been determined to hold native title rights. No historical or environmentally sensitive sites have been identified in the area of work.</li> <li>The tenement is in good standing and no known impediments exist.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Magnum deposit was a greenfield discovery by Gindalbie-Croesus in 1997, with the Calibre and Corker deposits being greenfield discoveries by Antipa in 2012.</li> <li>Antipa has completed follow-up exploration of the Magnum deposit/area (between 2011 to 2014); however, there has been no other exploration of the other 2016 target areas or deposit region by other parties.</li> <li>Exploration of the Citadel Project region has involved the following companies: <ul style="list-style-type: none"> <li>BHP Exploration (1991 to 1996);</li> <li>Croesus Gindalbie JV (1997 to 2001);</li> <li>Teck Cominco (Croesus Gindalbie JV) (2002 to 2003);</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>• NGM Resources (Croesus Gindalbie JV) (2004 to 2005);</li> <li>• Glengarry Resources/Centaurus Metals (2006 to 2010);</li> <li>• Antipa Minerals Ltd (2011 to September 2015); and</li> <li>• Antipa Minerals Ltd and Rio Tinto Exploration Ltd (October 2015 to 2016).</li> </ul>
Geology	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The geological setting is Paterson Province Proterozoic aged meta-sediment hosted hydrothermal shear, fault and strata/contact controlled precious and/or base metal mineralisation which is typically sulphide bearing. The mineralisation in the region is interpreted to be granite related. The Paterson is a low grade metamorphic terrane but local hydrothermal alteration and/or contact metamorphic mineral assemblages and styles are indicative of a high-temperature local environment. Mineralisation styles include vein, stockwork, breccia and skarns.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>• <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i></li> <li>• <i>easting and northing of the drill hole collar</i></li> <li>• <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>• <i>dip and azimuth of the hole</i></li> <li>• <i>down hole length and interception depth</i></li> <li>• <i>hole length.</i></li> <li>• <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All meaningful and material Citadel Project exploration information has been included in the body of the text or can sometimes be found in previous public reports and various WA DMP (WAMEX) publicly available reports.</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>• <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li>• <i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Reported aggregated intervals have been length weighted.</li> <li>• No density or bulk density is available and so no density weighting has been applied when calculating aggregated intervals.</li> <li>• No top-cuts to gold or copper have been applied (unless specified otherwise).</li> <li>• Intersections in this report are composited for the purposes of highlighting geochemical anomalism/trends from individual assays using the criteria below which are considered relevant for both the reconnaissance nature of the drilling programme and metal indicators for various known mineralisation styles within the Paterson Province.</li> <li>• Nominal cut-off grade/s applied during data aggregation: <ul style="list-style-type: none"> <li>• <math>\geq 250</math> ppm copper which also satisfy a minimum down-hole intersection of <math>\geq 1</math> metre; and/or</li> <li>• <math>\geq 0.05</math> g/t gold which also satisfy a minimum down-hole intersection of <math>\geq 1</math> metre; and/or</li> <li>• <math>\geq 0.20</math> g/t silver which also satisfy a minimum down-hole intersection of <math>\geq 1</math> metre; and/or</li> <li>• <math>\geq 200</math> ppm zinc which also satisfy a minimum down-hole intersection of <math>\geq 1</math> metre; and/or</li> <li>• <math>\geq 150</math> ppm lead which also satisfy a minimum down-hole intersection of <math>\geq 1</math> metre; and/or</li> </ul> </li> <li>• NB: In some instances zones grading less than the cut-off grade/s have been included in calculating</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>composites or to highlight mineralisation trends.</p> <ul style="list-style-type: none"> <li>Higher grade intervals of mineralisation internal to broader zones of mineralisation (if any) are reported as included intervals.</li> <li>Metal equivalence is not used in this report.</li> </ul>
<p><i>Relationship between mineralisation widths and intercept lengths</i></p>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. ‘down hole length, true width not known’).</i></li> </ul>	<ul style="list-style-type: none"> <li>In the “eastern domain” of the Citadel Project the Magnum and Calibre deposits the interpreted hydrothermal alteration, vein and breccia related gold-copper mineralisation is interpreted to be dominantly approximately north-south striking and moderate to steep east-northeast dipping. AT corker stratabound semi-massive polymetallic precious and base metal mineralisation dips shallow to moderately to the east-southeast.</li> <li>In the areas of 2016 RC drilling located in the “western domain” of the Citadel Project the attitude of “bedding” and/or mineralisation was unknown.</li> </ul> <p><b>RC Drill Holes</b></p> <ul style="list-style-type: none"> <li>The RC drill holes in the eastern domain target areas were generally inclined at -60° toward the southwest or northwest. Therefore, downhole width is estimated to approximate 60% to 80% true width dependent on the local geometry/setting.</li> <li>The RC drill holes in the western domain target areas were vertical. Therefore, the relationship between downhole width and the true width is unknown.</li> </ul> <p><b>Diamond Drill Hole</b></p> <ul style="list-style-type: none"> <li>The Blue Steel diamond drill hole was inclined at -65° toward the southwest. In general, the intersection angles for the variety drilling generations appear to be at a moderate angel to the average attitude of bedding and mineralised zones. Therefore, downhole width is estimated to approximate 60% to 80% true width dependent on the local geometry/setting.</li> </ul>
<p><i>Diagrams</i></p>	<ul style="list-style-type: none"> <li><i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>All appropriate maps and sections (with scales) and tabulations of intercepts are reported or can sometimes be found in previous public reports and various WA DMP WAMEX publicly available reports.</li> </ul>
<p><i>Balanced reporting</i></p>	<ul style="list-style-type: none"> <li><i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>All significant results are reported or can sometimes be found in previous public reports and various WA DMP WAMEX publicly available reports.</li> </ul>
<p><i>Other substantive exploration data</i></p>	<ul style="list-style-type: none"> <li><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>All meaningful and material information has been included in the body of the text or can sometimes be found in previous public reports and various WA DMP WAMEX publicly available reports.</li> <li>Zones of mineralisation and associated waste material have not been measured for their bulk density; however, Specific Gravity (“Density”) measurements have been taken from diamond drill core for the Magnum, Calibre and Corker deposits.</li> <li>Multi element assaying was conducted variously for a suite of potentially deleterious elements including arsenic, sulfur, lead, zinc and magnesium.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>• Geotechnical logging was carried out for all Antipa diamond drillholes at Magnum, Calibre, Corker and Blue Steel for Recovery, RQD and Fracture Frequency.</li> <li>• No Geotechnical logging (e.g. Recovery, RQD and Fracture Frequency) was obtained from the WAMEX reports.</li> <li>• Information on structure type, dip, dip direction, alpha angle, beta angle, gamma angle, texture and fill material derived mainly from diamond drilling is stored in the Company's technical SQL database.</li> <li>• No information on structure type, dip, dip direction, alpha angle, beta angle, gamma angle, texture and fill material was obtained from the WAMEX reports.</li> <li>• Preliminary Metallurgical test-work results are available for the Calibre deposit and these have been previously publicly reported.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Significant regions of gold-copper mineralisation identified by the 2016 drilling programmes remain open in multiple directions and require further investigation via additional drilling ± geophysical surveys to test areas more broadly for zones of higher grade mineralisation and the lateral and vertical mineralisation extensions and continuity beyond the limits of existing very broadly spaced reconnaissance (RC) drilling limits.</li> <li>• All appropriate maps ± sections (with scales) highlighting areas of possible extensions and main geological interpretations have been included in the body of the text.</li> <li>• Maps ± sections (with scales) highlighting areas of possible future drilling are currently not available.</li> </ul>